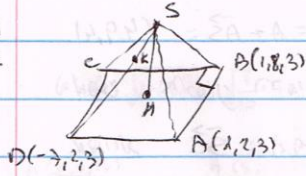


4.18  
5



(0:0:0) ונקודת המפגש של המישורים

$z=3$  מישור המישור (1)

$S = (-3, 5, -7)$  נקודה

$C = D + \vec{AB} = (-7, 8, 3)$

$\frac{x+3}{4} = \frac{y-5}{3} = \frac{z+7}{-10} : SC$  מישור

$\vec{n} = (0, 0, 1) \quad \vec{SB} = (4, 3, 10) \quad (2)$

$\sin \alpha = \frac{|(0, 0, 1) \cdot (4, 3, 10)|}{\sqrt{1} \sqrt{125}} = \frac{10}{\sqrt{125}} = \frac{2}{\sqrt{5}} \rightarrow \cos \alpha = \sqrt{1 - \frac{4}{5}} = \sqrt{\frac{1}{5}} = \frac{\sqrt{5}}{5}$

$K = (-4, \frac{17}{4}, -\frac{19}{4}) \quad (3)$

$S = \frac{1}{2} |\vec{AC} \times \vec{AB}| = \frac{1}{2} \begin{vmatrix} i & j & k \\ 0 & 6 & 0 \\ 5 & 6 & \frac{1}{2} \end{vmatrix} = \frac{1}{2} |45i - 30j| = \frac{\sqrt{2025}}{2} = \frac{45}{2} \sqrt{17}$